REMARKS

Applicant gratefully acknowledges Examiner Tsegaye and Supervisory Examiner Pezzlo for the courtesy of conducting a personal interview on October 4, 2004, and a follow-up telephone interview on November 9, 2004, to further refine claim wording for the independent claims. Applicant believes the claim amendments herein provide the wording upon which the Examiners insisted.

It is noted that, notwithstanding any claim amendments made herein, Applicant's intent is to encompass equivalents of all claim elements, even if amended herein or later during prosecution.

Claims 1-20, all the claims presently pending in the application, stand rejected under 35 U.S.C.§102(e) as anticipated by Kaplan (U.S. Pat. No. 6,141,339).

This rejection is respectfully traversed in view of the following discussion.

I. THE CLAIMED INVENTION

Applicant's invention, as disclosed and defined in claim 1, is directed to an asymmetrical digital subscriber line (ADSL) system. The invention includes an apparatus on the station side in which a signal received from the apparatus on the subscriber side through the subscriber line is demodulated by a second ADSL modem. Thereafter, the digital audio signal is converted into an analog audio signal, which is supplied to an analog telephone network, and at the same time high-speed digital data is supplied to a high-speed digital data network, while an analog audio signal of the analog telephone network is converted into a digital audio signal. The station side apparatus includes a line concentrator to concentrate the digital audio signal together with high-speed digital data of the high-speed digital data network by time division, and supplied to the subscriber line after being modulated by the second ADSL modem.

A subscriber line is interconnected directly between the first ADSL modem in the apparatus on the subscriber side and the second ADSL modem in the apparatus on the station side, with no intervening equipment.

An important feature of the invention is that the apparatus on the subscriber side and

apparatus on the station side convert each digital audio signal as well as each high-speed digital data into asynchronous transfer mode (ATM) cells in each respective line concentrator using time division.

As a result, the present invention provides a more efficient system for transferring an analog audio signal and a high-speed digital data signal together through the same ADSL subscriber line without using a plain old telephone system (POTS) splitter on the subscriber side and station side.

II. THE PRIOR ART REJECTION

The Examiner alleges that Kaplan anticipates the present invention as exemplarily defined by the claims 1-20. However, Applicant again submits that, as clearly described in MPEP §2111, the Examiner is confined to the plain meaning of the claim language, as this language would be interpreted by one of ordinary skill in the art.

During the above-mentioned interviews, the Examiners maintained that Kaplan reads on the independent claims. Applicant's representative explained how the plain meaning of the claim lanaguage precluded such interpretation but the Examiners insisted that the langugage did not clearly distinguish from Kaplan.

The Examiner has revised the previous rejection to now consider that MUX 220, shown in Figure 2, satisfies the final two claim limitations of independent claim 1, with similar wording in the remaining independent claims.

However, it is brought to the Examiner's attention that MUX 220 clearly fails to satisfy the plain meaning of the language of these two limitations. That is, as clearly shown in Figure 1, the interface with the MUX 120, 122, 124, 126 is with SONET rings 130, 132, rather than the ATM network 150 that would be required to satisfy the claim language.

That is, because of the intervening SONET rings 130, 132 in Kaplan, there is no second ADSL modem in this reference. In spite of the Examiner's characterization that: "... *MUX '220 inherently has an ADSL modem to receive the ADSL signal to convert it into ATM cell[s] for interfacing with ATM network of Fig. 4* ...", Applicant respectfully submits that the configuration of Figure 1 clearly requires that the MUXs 120-126 (that correspond to MUX 220 in Figure 2) on the subscriber side make the conversion to SONET/ATM, as confirmed by

the description at lines 57-58 of column 3.

Moreover, the plain language of the independent claim requires that the device on the station side (which the Examiner considers as being MUX 220) also converts the digital audio into an analog audio and the digital data into high-speed digital data for a digital data network. Therefore, since MUX 220 does not make this conversion into analog audio, it cannot serve as the component that satisfies the plain meaning of the claim language.

The Examiner cannot simply disregard the engineering reality of Kaplan in which the SONET rings 130, 132 interface with the ADSL/ATM connection on the subscriber side.

The present invention clearly does not have this same SONET interface of Kaplan, as reflected in the description of the independent claims.

Applicant believes that this claim wording clearly distinguishes from Kaplan. However, to expedite prosecution, Applicant has amended the independent claims to incorporate the wording requested by the Examiner during the above-mentioned interviews.

Hence, turning to the clear language of the claims, in Kaplan there is no teaching or suggestion of: " ... an apparatus on the station side in which a signal received from said apparatus on the subscriber side through the subscriber line is demodulated by a second ADSL modem ... and a subscriber line interconnected directly between said first ADSL modem in said apparatus on the subscriber side and said second ADSL modem in said apparatus on the station side, with no intervening equipment", as required by claim 1. The remaining independent claims have similar language.

For at least the reasons stated above, Applicant respectfully submits that the cited references fail to teach or suggest every feature of independent claims 1-20. Therefore, the subject matters of claims 1-20 are fully patentable over the cited references. Based on the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejection.

III. INFORMAL MATTERS AND CONCLUSION

In view of the foregoing, Applicant submits that claims 1-20, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to withdraw the rejection and pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner may contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

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Frederick E. Cooperrider
Reg. No. 36,769

McGinn & Gibb, PLLC
8321 Old Courthouse Road, Suite 200
Vienna, VA 22182-3817
(703) 761-4100
Customer No. 21254